

IN THIS NUMBER

Gladioli - - - - By Ralph F. Cushman
In Our Elfin Woodlands - - By Ralph W. Sumner
The Flower Garden . . . By Mary Matthews
The Vegetable Garden . . . By Walter Birch
Boys' and Girls' Page

JUNE, 1921

TEN CENTS

F. A. BODE Landscape Gardener

Two years general foreman Exposition Grounds, 1913-14

Five years general foreman City Park, 1915-20

Gardens and parks designed, planted, maintained.

Insect and disease pests controlled.

Sprinkling systems installed. I do tree blasting also

Prices reasonable—estimates furnished.

RES, PHONE HILCREST 664J SALESYARD 1260 UNIV. AVE.

You're Not Licked

— Until you quit. Don't quit buying U. S. Saving Certificates, they will help you win.

Ask your postmaster about the Treasury Savings Stamps and Treasury Savings Certificates.

The price of a \$25 Treasury Savings Certificate this month is \$20.85.

Phone, Main 1124

1201 Broadway, San Diego

OSBORN G. AUSTIN Beacon Hills Nursery

Landscape Architect and General Nurseryman

Grounds laid out Artistically-None too Large-None too Small

I carry the largest assortment of Nursery stock in the county, including Fruit Trees, Shade Trees, Shrubbery, Roses, Bedding Plants, Pot Plants, Ferns, Bulbs and other rare plants seldom seen. Full line of Seeds (Flower and Vegetable), Fertilizers, Soil, Leafmould, and Insecticides. In fact if you are unable to find what you want in my yard, it is doubtful you can find it elsewhere.

Information Cheerfully Given on All Plant Troubles.

The California Garden

Published Monthly by the San Diego Floral Association
One Dollar per Year, Ten Cents per Copy

Vol. 12

POINT LOMA, CALIFORNIA, JUNE, 1921

No. 12

WHAT'S IN A GARDEN?

What is in a garden? Or rather, what do we get out of it? If a vegetable garden we enjoy the satisfaction of fresh crisp vegetables for our table-sometimes effecting a material saving to the family exchequersometimes not. If our garden happens to be an ornamental one we are furnished with cut flowers for our homes for our buttonholesadornment for our yards, and consequent increase in valuation of our property. things are all worth while, but we get besides all these, health; -better than all the medicinal drugs in the world is exercise in the open for about 99 per cent of the ills that flesh is heir to; the real abiding satisfaction of producing something useful or beautiful or both, and what is perhaps most important of all,-if you "grow your own" garden,—an appreciation of the joy to be found is the simple, homely manual labor necessary to the creation and maintenance of

a good garden. It seems to us as if it is possible to derive a moral benefit from digging in the dirt—it may make the physical backbone ache, but is our belief it will tend to stiffen up the moral one.

There is a certain very dignified, very prominent professional man who comes to our mind for who (we blush to say it)—we had entertained a passive, mild sort of dislike, certainly we did not accord him the respect to which his position presumably entitled him—until, one day we saw him in his garden attired in shabby khakis chaffeuring a shovel around. His stock rose to par at once, and it seems to us quite properly so.

There is hope for a man who finds a zest in looking for new blooms on his pansies or roses, or zinnias, or whatever it is, or in apprehending a tiny shoot originating from carrot, or beet or radish seed planted by his hands. Try it out.

GLADIOLI

By Ralph F. Cushman.

The Gladiolus belongs to the Iris family. The garden Irises, Freesias, Watsonias, Crocuses are also familiar members. South Africa, Southern Europe and Tropical America are the habitats of the greatest number of wild species.

Botanists class this genus as cormaceous. While we speak of the cormals as bulbs, it is incorrect. Plants having scales as lilies, hyacinths, onions are correctly classed as bulbous. The corms hold the food supply during the resting period and permit of the plants being moved from the soil, and stored or moved from place to place, thus being easily handled commercially.

In taking up this subject it might be well to determine the proper pronunciation. I prefer the latin form Gla-dí-o-lus as given by Webster and other dictionaries. The proper plural is Gladioli. The plural form Gladioluses is permissable and I understand is often used by the English.

Early data on the gladiolus is rather meager. A. D. 200, one Atheneus is credited with mentioning Gladioli as "appropriate for

planting on the graves of virgins". The real foundation stock of modern gladioli were introduced in the latter part of the 18th cen-G. blandus, cardinalis, communis, tristis and others formed the larger part of the foundation stock of our modern garden varieties. Most of them were from the Cape and of the early flowering species. It is from the early flowering class that the first important hybrid was produced, Colville's corn fiag or G. Colvillei. This was raised at Colville's Nurseries, Chelsea, England in 1823. Colvillei hybrids are especially adapted to this, or California, climate. G. Colvillei Alba was introduced in 1872, this was a white variety with colored anthers, it was soon followed by the Bride, also white including the anthers. The Colvillei group are especially adapted for Eastern greenhouse forcing. Previous to the recent plant quarantine they were imported by the hundred thousands at about three to five dollars per thousand. Last fall I was obliged to pay thirty-five and forty dollars per thousand for California grown bulbs.

From about 1823 to 1850 prominent hy-

bridists of England, France and other European countries became greatly interested in the improvement of the species, the interest has gained on an ever increasing scale and development until we now have them in a bewildering and endless variety of forms and colors

It is interesting to note that in 1820, Dean Herbert, an English enthusiastic hybridist of gladioli, wrote:

"I am persuaded that the African Gladioli will become great favorites with florists, when their beauty in the open border, the facility of their culture, and the endless variety that may be produced from seed by blending the several species, are fully known, nor will they be found to yield in beauty to the tulip and ranunculus."

How true this prediction of so eminent a horticulturist one hundred years ago, I will leave you to judge.

In 1840 G. Gandavensis hybrids were produced, resulting from crosses of the species G. psittacinus and cardinallis or oppositiflorus. There is some doubt as to which of the latter two was used. These were catalouged and introduced by M. Van Houtte. It is of interest to note that a little later (1848) G. Brenchleyensis appeared, a firey scarlet having nearly all of its flowers open at one time. Field rows of this variety make a brilliant spectacle when in full bloom. It ranks next to G. Colvillei in being the oldest existing type of gladioli.

M. Eugene Souchet, gardener of Napoleon III was one of the greatest of the many breeders of gladioli. His work covered about thirty years, from 1850 to 1880, when he died. His varieties took foremost rank and maintained the lead during his life. About the time M. Souchet began the improvement of gladioli the Queen of England visited Fountainebleau. During her visit the flower borders were enlivened with cut spikes of gladoli thrust in vases of water among the common garden The Queen was so impressed with this display that she took them under her special patronage. Their being placed on the royal table led the frequenters of her court to follow the example set them, and a demand almost unprecedented in the history of flowers followed.

In 1880 and 1882 the Nanceianus, Childsii and Lemoinei hybrids were introduced and met with considerable popular favor. Childsii is probably better known in this country than Nanceianus, owing to the fact that John Lewis Childs of Floral Park fame owned and exploited this strain. It and Nanceianus are quite alike. My experience with them seemed to show they lacked vigor.

In 1882 V. Lemoine sent out his Lemoinei hybrids. The distinguishing characteristics being a rather small thick petaled flower

with a distinct blouching in the throat on the lower petals, stems quite apt to be crooked and rather dwarf in habit of growth. The variety Marie Lemoine being a good type of this hybrid. Perhaps some of you may be familiar with the Lemoinei variety, Incendiary; its scarlet flowers and very crooked stems making it very conspicuous.

With the introduction of the G. Gandavensis, Childsii, Nanceianus and Lemoinei groups of gladioli, coupled with the work of our American hybridists which were getting very active at the beginning of the present century, the real popularity of gladioli as a garden and decorative flower began.

The following is a list of some of the gentlemen who have been prominently identified with the development of the genus in this V. H. Hallock, John Thorp, John Lewis Childs, C. L. Allen, James Vick, H. A. Dreer, Dr. William Van Fleet, Richard Diener, Luther Burbank, Matthew Crawford, H. H. Groff and A. E. Kundred. These men have so crossed and intermingled the different strains and classes, gone back to the native wild species and brought in new blood, selected and weeded out the undesirable traits of some of the earlier hybrids until we have now what might justly be called Gladiolus Americanus. The dominating characteristics are robust growth, large open flowers and clear pure coloring.

H. H. Goff, of Simcoe, Ontario, Canada, did a great deal to strengthen and develop American gladioli. His large and distinctive exhibit at the Buffalo Exposition in 1901 and the following exhibits and publicity given his hybrids by Mr. Arthur Cowee of Berlin, N. Y., probably gave as great an impetus to gladiolus culture as any former efforts. However, I feel in justice to myself that I may mention that at the Chicago World's Fair we held an exhibit of cut flowers of gladiloi which was kept fresh with shipments from our fields, shipped three hundred miles, three times per week. These were seedlings of my own production, for which we received a bronze medal. This exhibit was kept in prime condition, for one hundred days and required the handling of 45,000 cut spikes. I also made the first display of cut gladioli at the Atlantic City convention of the Society of American Florists (I think 1894), for which we were awarded a Certificate of Merit, the highest award given by the society. These exhibits were followed by many others which no doubt had some effect in popularizing the gladioli.

While men at this time were doing so much to advance gladioli the introduction of the varieties America and Francis King which were quickly followed by Niagara, Panama, Pendleton and other meritorious varieties

Continued on page 6

In Our Elfin Woodlands

Valley Talley Ta

By RALPH W. SUMNER

Dalle of the state of the state

The inhabitants of the Elfinwoods have had a surprise party given them. They quite reasonably supposed that the rain-drops had given up dancing within their porders for the season, but here they came in May just as if it were only January. The plants of course were all glad to get a drink, but it was too late for many of their company to show their real beauty. However, in their wonderful way they developed seed on tiny plants and cast them to replenish the earth.

Such beauties as the lavender "Mariposa" (Calochortus catalinae) Brodiaea minor, and even the "Wild Hyacinth" (Brodiaea capitata) most grew to about half their usual height. Flowers that are with us now, many of them, are stunted. But the shrubs and trees seem to be going ahead with renewed energy, and many of the summer and fall ploomers will hardly realize that the early spring has had such a hard dry time of it.

Not rong after the rain I went into what I like to call "Steep Ravine." It runs from between the Nursery and east gate of the Expositon Grounds east into "Powderhouse Canyon" and

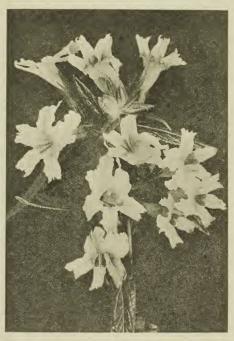
has very steep slopes. On the southern exposure such thing as "Cactus", "Box Thorn", "Turkish Rugging" and others of like nature thrive—on the north exposure luxuriant grasses, ferns and shade loving annuals revel. The two extremes are so distant that I feel sure you'd like to hear about it.

· Climbing carefully down the side, lest I took a misstep and plunged into a mass of "Cholla Cactus," in this cast Opuntia prolifera, I worked along with eyes open to see

what might be growing there in the protection of the spiny inhabitants. I very rarely have gone down into this place without getting stuck with a cactus bur, and bur, one can rightfully call them, for the short joints break very easily from the main plant, and often are carried long distances, there to be replanted as cuttings. If a spine gets into your shoe a pair of pliers needs to be used to get it out, probably to break in the process. If it gets into your hand or leg—weil,

don't experiment, walk around.

Amongst these spiny members were hard, scraggy, low growing shrubs not over a foot and a half high that no doubt were twenty years old, and very likely more. Tiny fleshy leaves appear quite early, then small white flowers, the whole aspect being to shrink into as careful an existence as possible. "Box-thorn" (L vcium Californicum) is its name, and while there are no real thorns yet, the twigs are so stiff that they bear a likeness. Flat on the ground, this year rather sparsely, grow the "Turkish Rugging" plants (Chorizanthe fimbriata). Red as a Turkish rug might



"MONKEY FLOWER"

MIMULUS LUTEUS

Photograph by George G. McLean, Carpinteria

be, it makes a bright ground cover, but it, too, is protected by a hard exterior. No animal would venture to nibble it, and the sun's hot rays only help the growth of brittle, hard branches.

But now let us cross to the other side only a hundred feet away. Tall, slender grasses, such as "Anderson's Stipa," a variety of "Blue Grass" (Poa sp.), "Squirrel tail Fescue" and others cover the slope. Nestled under bushes and banks are "Polypodys," "Maiden-

hair Fern," "Silver Backs," up through the grasses grow "Chinese-Houses" (Collinsia bicolor), the small flowered Nemophila with its fragile yet spiny stems. The spines are very tiny and unable to cling to other plants. Another delicate little plant which belongs, strangely, to the Buckwheat family, is Pterostegia drymarioides. As often, a hard name for a modest little plant. Let us call it "Wing-leaved Vine" for its tiny, opposite, lobed leaves look a little like wings. Its thread-like stems clamber through the grass and the sun turns them red if it gets a chance.

Let me urge you to use your lens on these Lilliputian beauties of the plant world. Anyone can walk out into the "Elr's abode" and see the larger things, but nature holds her choicest from the sight of careless eyes.

As the season progresses, other shade lovers appear, all of them within easy hailing distance of their hard favored neighbors.

Going out of this canyon at the bottom was growing a single Viguiera laciniata, cousin to Encelia California, the flowers being quite similar, but the leaves smaller, more wrinkled and somewhat lobed. The question that interested me was how came it there, amongst the "Sage-brush." Not another anywhere about.

A little further was a beautiful mass of deep red "Bush Monkey Flower" (Diplacus puniceus). The "Yellow Monkey Flower" (Mimulus luteus) here pictured is closely related, but is a soft annual instead of a perennial bush. The term Diplacus is used with all the bush forms of Mimulus as a distinction and as a difference, too.

As I got into the main canyon floor the "White Sage" (Ramona polystachya), and its cousin the "Black Sage" (Ramona stachyoides) were both quite frequent and in full bloom. Both of these plants are well known bee plants, especially the latter. There is nothing black about this Sage, but I think it received the common name because of all in the immediate family, it has the darkest foliage. The two long, slender stamens of the "White Sage" gives the delicate lavender flower a very attractive look, and a few stalks are often plucked for decoration in spite of the gummy foliage.

Near the dried up stream beds were huge rounded bushes of glossy "Holly-leaved Cherry" (Prunus ilicifolia). Some of them were a mass of creamy blossoms, bees busily buzzing amongst them. on others not a bloom to be seen. Evidently nature was giving them season's vacation or else they were laggards, merely existing, not producing anything.

"Fairy-mats (Euphorbia polycarpa) seem to adapt themselves to either canyon or hillside, and generally in open spots to the sky. Perhaps that is so the Fairies can dance on their mats in the moonlight!

Soon I came to the burnt over area that promised so much in the Spring. The dryness made it somewhat disappointing, yet how wonderfully had Nature attempted to reclothe her bareness. All the shrubs had sent out new growth, the Rhus red and glossy, the Buckthorn covering the old blackened stubs in a green leaved carpet. Tall clumps of "Giant-grass" had sprung up where the roots of old shrubbery has been. This tall perennial grass seems to seek the protection of shrubs from all its hardy coarse appearance. In a high wind it adds its musical swish to the rest of nature's orchestra. Do you remember how John Muir used to listen to the wonderful music of the storms in forests and amongst craggy peaks.

If you would understand why he enthused so, walk into our Elfinwood some windy day. Pass through a Eucalyptus grove, down into a canyon. Keep actively alive to as many sounds and also sights of reversed leaves, shaking branches and skipping material on the ground that your stimulated senses can conceive. Breathe deep the swift flowing air fresh laden with sweet odored oxygen, give your shoulders a shake and you are ready to face with courage the petty cares that once seemed big.

Seek out a sheltered nook, sit down and watch the tall grasses sway like forest trees, the quick shake of shorter ones, and the delicate annual flowers that you beffeved too tender for such rough action. Some of the stubbier ones even seem to be shaking with laughter, and from all you hear a gentie whispering of enjoyment even above the thrash of heavier limbs.

But let us continue over the burned area. Clumps of "Wild Heliotrope" (Pnacelia tanacetifolia) were well massed but stunted. "White Forget-me-not," sometimes in good years looking like floral snow was rather sparse. Chaenactis glabriuscuia, the yellow daisy-like flower with large outside disk flowers and no rays, was growing quite jauntily. Near the stream bed, was a wonderful array of "Indian Pinks" (Silence laciniata). As always, these plants were growing close to brush for protection. Just beneath and extending quite away along the bank were clumps of "Wild California Fuschia" (Zauschneria microphylla), no flowers yet as they are not due till summer, but the small woolly leaves giving promise of the cardinal bloom to follow soon.

In a line of brush where the hillside starts up, where tall members of "California Bee Plants" (Ccrophularia Californica), the buds just opening to the urging bees that came to investigate.

In this place where last year the "Chilicothe" pods, sometimes spoken of as "Wild Cucumber"—were plentiful, I round only

Continued on page 7

The June Gardens

Dalla Talla Dalla Talla Dalla Dalla

THE FLOWER GARDEN

By Mary Matthews

This is a good month to rearrange your garden if you are not altogether satisfied with it, and who ever is? Go over it and make notes as to where you would like changes, decide what you would like to grow on next season and what to eliminate. When you strive to have a beautiful garden always have an eye to the future, but also look backward, see where your mistakes were and profit by them.

You can put in seeds of late blooming annuals with good results this month. Bulbs that have bloomed in the hardy border can, where the foliage has begun to turn brown, be lifted and put into some out of the way corner, covered over with a little earth and left to ripen, and the space they had in the border can be used for other things. The last of this month you can sow in the seed boxes Delphinium, columbines, stocks and many others for winter and spring blooming.

If you care for Cinerarias sow seeds, this month and next. Scatter the seed thinly over the surface of the soil in a very shallow box. The soil should be light and fine; but the box in a shaded spot if you have no lath house and keep the soil moist by shading with a piece of cheese cloth and spray through this every evening. the young plants have made a few leaves prick them off into other boxes, letting them stand about two inches apart. them out of the wind but give sunshine and air; the young plants are quite delicate and a strong wind soon ruins them. should be turfy loam and sand.

If you are growing the beautiful blue Delphinium, var. Belladonna, so much admired, put the little seedlings in the ground now, giving a good loose soil, with some sand, also lime, to keep away slugs and snails, as they dote on them and will often destroy a whole crop over night. Where you still have small plants of such things as asters, zinnias, cosmos, etc., in boxes, they should be transferred into the ground, keeping a few in reserve to fill out vacant spots later on.

Watch your chrysanthemums closely; do not let them lack for water at any time, and keep back all suckers from the roots. Put in a few more gladiolus now for late bloom. Gladiolus have grown very much in favor of late, and well they may, with all the won-

THE VEGETABLE GARDEN

By Walter Birch

It is important to recognize the fact that the successful gardener must be constant in his work, not neglecting the garden one week and trying to make up the next, but doing a little all the time, so that the growing plants are always kept well cultivated and moist enough to promote steady growth. It is therefore necessary for the best success to cultivate carefully close to the vegetables and deeper towards the middle of the rows, leaving a fine surface so as to conserve moisture. As the plants grow larger it is well to draw the soil slightly to them. Hill them up a little. This keeps the roots covered and in cool. damp soil. As soon as the immediate effect of the rain is over, furrow between the rows and run the water slowly down these furrows so that it soaks in well as it goes. After a couple of days, or as soon as the soil will work up nicely and not stick to the tools, cultivate all the irrigated portions thoroughly. Light sandy soil can be worked much sooner after irrigating than heavier clay soils. Sprinkling may be resorted to between irrigations and the ground gone over with a rake.

It takes moisture to make good succulent vegetables, and frequent irrigations and cultivations to keep the moisture where the plants can get it.

During this month and on through the summer every gardener should be on the lookout for insect pests and fungous diseases, otherwise your work in the garden so far may be of little avail, and you will be deprived of the fruits of your labor just when you flattered yourself that they were almost in your hands. On the other hand, if you now preserve the little extra work and expense required, will make all the difference between success and failure.

With an inexpensive spray pump and a small supply of Black Leaf "40", Bordeaux mixture or Lime-Sulphur and Arsenate of Lead you can successfully combat practically all the insects and diseases that beset growing plants during the summer months. Specific directions go with each of these commodities, but briefly, the Black Leaf "40" destroys aphis and flies, Bordeaux mixture or Lime-Sulphur rust, blight and fungus diseases and Arsenate of Lead leaf eating insects, etc.

Planting of many kinds of vegetables can be continued during June in order to keep

THE FLOWER GARDEN

Continued from page 5

derful new ones being shown now. They are our most satisfactory summer blooming bulbs. One can have them at all times, in all colors, and you might say, sizes. Primulinus tubers are favorites or mine, with their delicate shades of yellow, orange and salmons, and the dainty hooded flowers. I very much fear though they will not be so charming if the hybridizers continue to consider size the chief thing.

Irrigate, cultivate, weed and spray this month. Where manure is not available, work bone meal very carefully into the soil and water freely to prevent burning. Where plants are coming into bloom a little nitrate is good around the roots, about a teaspoonful to a gallon of water, as not to let it touch the foliage.

Cut worms, slugs, and snails are all apt to be bad these cool nights. Watch out for them.

GLADIOLI

Continued from page 2

made them popular with one florist's profession. While I do not know what Mr. Frank Banning of Kinsman, O., received for his small stock of American when he sold it to Mr. Childs, I do know that he turned down an offer of \$4,000 cash for it. Whatever may have been the origin of America, to Mr. Banning must go the credit of having the discernment to select and propagate the most popular variety up to the time of its advent. To Mr. Banning must go the credit of selecting Niagara and Panama.

The production of G. Princeps by Dr. Van Fleet in 1897, introduced by Vaughn in 1903, marks the successful results of efforts to make the real hybrid cross. This was called the amaryllis-flowered gladiolus. The extra large scarlet bloom would command attention among a hundred thousand. It is reported that Dr. Van Fleet received \$1,000 for his stock of princeps.

The introduction of Mrs. Francis King by Vaughn gave the cut flower trade a valuable variety. Its vigor of growth, brilliant color and large flowers—four to six open at one time, good shipping qualities and wonderful productiveness have seldom if ever been excelled.

I have especially mentioned the preceding varieties because I think they mark the begining of a great popular demand for their use both by amateur and professional. To especially mention the hosts of new and wonderfully beautiful varieties now clamoring for public favor would make this paper too lengthy.

Gladiolus Primulinus, a species of recent introduction deserves special mention because it is being freely used by many hybridists in crosses with our more recent varieties, Pri-

THE VEGETABLE GARDEN

Continued from page 5

a fresh supply going all through the summer and fall. Sweet corn and string beans can go in every two or three weeks, and if you have not already done so, plant your melons, cucumbers, squash and pumpkins. You can also renew supply of beets, carrots, radish, etc. It is getting pretty late for the successful planting of peas.

mulinus, or Maid of the Mist, has given us a race mainly distinguished by many soft shades of yellow and orange. The Flowers are hooded and widely spaced on graceful slender stems. I feel safe in predicting a wonderfully popular future for primulinus hybrids.

The crowning glory of all recent efforts in improvement in gladioli must be accorded to Mr. A. E. Kundred, of Goshen, Ind. To him all workers in gladioli must take off their hats and say all honor to the man who produced "The Ruffled gladiolus", the distinct form which is as great an improvement in gladioli as the wave in the sweet pea. He has other laurels to his credit for many of the later popular sorts are of his production. Some of the best known are Mrs. Frank Pendleton, Chicago White, Myrtle, Mrs. Dr. Norton, Fairie, and many others.

For details as to varieties, cultural methods, soil, fertilizers, storage and so forth, I refer you to the many good catalogues, and publications on this subject.

WILD SHRUBS AT THE SHOW

For some unaccountable reason the Wild Shubbery Exhibit displayed in a natural setting in the gallery at the recent Flower Show was not mentioned last month.

It deserves considerable attention for shrubs from desert, back country and coast were parading themselves all tagged in common and Botanical names, and many inquirers were told of the useful position these wild deniens might fill, and in land-scape and our own gardens. It took considerable time to collect over such a wide area, and it was through Mr. Marston's generosity that it was made possible.

Of the desert plants probably the tall thorny "Candlewood" with its beautiful red tips of bloom and the lowly Opuntia Cactus with blueish hue and purple flowers attracted most attention.

The plea for the protection of "Torrey Pines Park" was evident in the blackened log specimens and a few branches of the tree itself. It is hoped and besteved that relief in this regard will soon come, for influential citizens have not passed lightly over the need.

A number of these Flower Show specimens are still on exhibit at the Natural History Museum and are decidedly educational along the plant line.

THE MAY MEETING

The monthly evening meeting of the Association was held at the home of Mrs. A. H. Sweet. President Gorton announced that the next few meetings were entitled to a large attendance. On June 7 the outdoor meeting is at the residence of Miss Ellen B. Scripps of La Jolla. La Jollans have always taken a keen interest in the Floral Association and a big outdoor delegation is expected from San Diego to meet flower lovers of La Jolla on their own ground. On June 21st the annual meeting for election of officers convenes at the Southern California Music Store.

Mr. Hieatt, chairman of the Show Committee, made a brief report or the Rose Show. General entries increased this year 50 per cent and rose entries 88 per cent. About \$720 were taken in. After paying expenses and giving 15 per cent or the gross receipts to the Civic Center Community Home Fund, the net profit is about \$500.

Miss Sessions was the main speaker on the subject, "Planting for Shady Places, Fuschias." Having been brought up in San Francisco, "The Fuschia City" of California, Miss Sessions has always loved fuschias. Being a lover of San Francisco the fuschia is perfectly adapted to wind and coor weather. It is a common sight to see plants in that city up to the second story windows.

But the fuschia is entirely at nome in San Diego, though it must be lonesome for the cold summer winds that sweep through the Golden Gate. The best place here for fuschias is the north side of the house, the coolest, shadiest spots. They do well on pergolas, on west exposures and some species grow in the sun. But since many plants demand sunny exposures fuschias should always have the right of way on the north slopes.

Tallest of the fuschias and one of the favorites is "gracilis" or "Baby," small with red sepals and purple petals. It is very effective on the south side of the Frado in the park and is widely planted in shady places about the exposition buildings. Other single species that succeed in the city are "Orchid," with pink sepals and purple petals, a fine, strong, rampant grower; "Monarch," similar in color to gracilis, but larger; "Black Prince" that will stand a sunny place; "Arabella" with white sepals and plnk petals; "Salmon Queen," pink and saimon; "Jupiter," red and purple; and "Minima," which is good for hedges.

Among the double varieties may be mentioned "Storm King," 'the most attractive, red and white; "Diamant," white with red streaks; "Phenomenal," a deep purple; and two with red sepals and white and lavender centers, respectively.

Fuschias are easy to grow; they tolerate most soils, but appreciate fertility and are excellent for new places and the amateur gardener. They may be propagated in the winter from the dormant hard wood by sticking cuttings in the ground as you would a fig cutting. In the growing season the new tip ends are used for cuttings. All fuschias have characteristic foliage, an infallible mark in distinguishing varieties.

It is most important to remember two facts: first that fuschias need neavy pruning in the fall or during the cormant season; secondly, they must be crained when the branches are young and tender to secure an upright, shapely plant.

Mr. Lawrence spoke interestingly about some handsome flowers which he brought. Most conspicuous in his bouquet was a splendid dark red hybrid amaryllis. He showed white and lavender seedling ranunculi from seed sowed last fall; also seedling columbine, purple with white centers. He showed also some fine gladioli, "Mrs. Pendleton" and Primulinus. Mr. Lawrence has picked gladioli blooms from his own plantings every day in the year for three years, lacking only eight days.

Mr. Hieatt exhibited a promising pink seedling rose.

Adjourned.

Carroll De Wilton Scott, Secretary.

IN OUR ELFIN WOODLANDS

Continued from page 3

dried up stems and leaves. In spite of its massive root, it seemed to have withered and gone to sleep without first developing seed. But the root is safe, and will make another effort, another season. Had nature not supplied this means, no doubt she would have forced this member to exert itself and produced at least some seed.

Again may I invite you into the Elfin abode. You will not be sorry for even a short walk if you keep alert to the growing life about you. Go read about "June" in the "Vision of Sir Launfal" by James Russell Lowell, and I believe you will accept the invitation.

Aladdin's lamp was wonderful in its accomplishments, but so are the deeds of those who have cash to combine with opportunity. Begin saving today with war saving stamps, quickly convertible into cash and always worth more than they cost you.

——BUY W. S. S.——

The speculative stocks, like the long hand of a clock, tell the minutes, but the Liberty Bond list tells the hour.

Little Journeys to Hillside Gardens

By Mary Matthews and Mary Greer

San Diego is very fortunate in her wealth of canyons, affording as they do unparalleled views of hill, dale and bay. Some of us do not know what delightful nooks and gardens are tucked away amongst canyons, where the lovers of growing things have been able to work out their individual plans of planting.

In the neighborhood of Robinson street and Albatross are delightful surprises. One may turn a corner, or go down a bank to find an attractive home in a kingdom of its own. Here there are views of hillsides dotted with groves of eucalpytus trees and patches of color made by the Mesembryanthumum Floribundum. Beyond lies the bay in ever-changing mood.

At the end of west Robinson street, Mrs. Yates has a small lathhouse, which is newly planted with various interesting specimens. She has an unusual collection of succulents, among them a fine yellow Mesembryanthumum. There is also a planting of fine wild flowers, among them being a good Salvia corducia or Thistle Sage.

In a neighboring garden is a fine Plumbago. This shrub is valuable and attractive for our hillsides, as it needs very little water. Also the Romneya Coulterii or "Matillija Poppy" should be planted in abundance on our canyon sides. We have in mind an isolated specimen that has a breadth of at least fifteen feet, reaching to a heighth of twelve feet or more. At this time it is coming into full bloom. Sometimes they are hard to establish, but once done they care for themselves and are a joy forever.

In one garden is a lemon verbena, which attains the proportions of a small tree, while its fragrant foliage and blossoms are always pleasant.

The many kinds of Mesembryanthemums are valuable as cover plants for all dry places and give us masses of color.

At Anderson Place and Fifth Street there is a fine border of the variety naving medium sized light pink bloom mixed with the dark pink variety. The planting is some two by one hundred feet in size and very pleasing to look at. The colors of all the Mesembryanthemums are good. It is a desirable plant for all byways and empty places, instead of our ever present weeds.

Another group of hillside gardens is at Spruce and Curlew Streets. At the beautiful home of Mr. and Mrs. Sweet, where the planting of trees, shrubs and vines is full of interest, the parking of English ivy on the north and west sides of the block gives a very good effect. The Dorland home

nearby has some canyon planting of trees and Mesembryanthmum that is interesting.

Two charming hillside gardens are those of Mrs. Scripps and Mr. and Mrs. Bingham, at Palm and Albatross Streets. The sidewalk parking in the Bingham garden is somewhat formal in its character. Well trimmed, tall Eugenia Myrtifolia shrubs and rounding cedar trees are used. On the lawn in front are two fine Metrosideros or "Pride of New Zealand." These are fine shrubs from New Zealand. The thick leaves are green above and whitish beneath. They form particularly handsome shrubs and do well near the sea. At the back of the house a flame color Eucalyptus ficifolia bloom. A good showing of annual and perennials gives the color we love. Enclosing the back garden is a well kept hedge of salt bush which gives the garden an air of privacy.

Next door is the garden of Mrs. William Scripps. It is attractive in its irregular lines. On the east is a growth of blooming hawthorn. This, with other shrubs, border the canyon, which is planted to trees and shrubs. As one goes down the canyon path, secluded by the trees and tending towards the blue bay and ocean beyond, with the scurry and twitter of many birds, and the exhilerating California sun lighting it all, the sense of peace and rest fills the senses.

The largest hillside garden is at Mission Cliff. Here there are always masses of bloom and color. There are still quantities of red larkspur, calendula and many other annuals in bloom. On the north side of the main building is a good specimen of the rather rare tree, Sterculia Acerifolia, which is just coming into bloom. It is well worth the seeing.



THE OPEN AIR SCHOOL

By Fidella Gould Woodcock

Nature study as taught in the public schools is an index to many of the live issues of education, but like much of the theoretic teaching it is more extensive than intensive. An acre of theories when measured over an acre of ground facts needs brass tacks to hold the essentials in the soil long enough to work out the experiment.

During the month of May the Francis Parker School with the co-operation of Mrs. Templeton Johnson and Mr. and Mrs. Earl Garretson, gave its biology class, conducted by Miss Winifred Perry, an outing trip to Descanso Oaks for purposes of study of geology and plant life at first hand. Nowhere more than in San Diego County are these studies interestingly correlated.

The aim of the day's drive was to bring the pupils with their note books and pencils into open minded contact with social and business units that go well with content study. Class-work is bound to become a duil grind unless by going out and about the different groups get enough ground magnetism to keep stirring the natural ability of the students to see the profitable life.

On the whole the problems of life work out with more satisfaction through the currents of thought in the free atmosphere of the elements than in the burning of midnight oil—the privilege of group discussion is, under a leader, a strong point in field work.

The obvious things along the way are the basis of correct reasoning, for it is from the known and tried that great discoveries have been made. One original invention does more to civilize the world than the promiscuous study of a world of facts in an unorganized way.

The legend that carries is the reason of being—radium, gold bearing quartz, silver, mica, galenite, all, are found in small quantities in the sand of eroded granite boulders, the worn-out remnants of a prehistoric age about our beaches.

When during a storm-tide the undertow casts up on Silver Strand these heralds of unexploited mines in the earth we are drawn to the sources. The rich alluvial of recent geologic times in the mountain fans that make the ranch lands of San Diego mesas and valley fill, the deepest and best of any alluvial soils in California, more valuable than the gold that these lands contain. Crossing from the austral sands of the sea coast by way of the Alpine drive the series of Sierra red where the water activities have been greatest along San Diego and Sweetwater rivers, is sometimes a stony loam, sometimes ground into fine mixed soils.

Cultivators on Point Loma are glad to bring tons of the standing loamy black peat from under the mesa oaks at Descanso for hot beds and special garden cultures, so saturated is it with the liquid ash of primitive larva beds of Volcan mountains brought down by Sweetwater River in flood times. At thirty-five hundred feet altitude there is, besides a wide range of variation between oaks the coast live oak and the interior live oak, a high mountain species. We include other species_the desert mountain oak, the scrub or chaparral oak, and the canyon oak with a marked advance in some of the conifers of the pinon belt.

Pseudotsuga macrocarpa, the big-cone spruce, is found throughout the Cuyamacas at an elevation of two thousand feet or more. It is the desert mountain form of the tree known commercially under the various names of Port Oxford cedar, Douglas Fir, and Douglas Spruce, the principal timber of the north Pacific slope.

Two of the nut-pines are represented here, the California and the Mexican pinons. Pinus monophylla, the one-leaf pinon, is an adance over the other species in its evolution

Inexpensive

N TO THE REPORT OF THE PARTY OF

Hot Water Service

is supplied by the CIRCULATING TYPE GAS WATER HEATER.

This little heater will supply all the hot water you want-for bathing, dishwashing, housework, etc.--within ten or fifteen minutes after the burners are lighted. The water runs, piping hot right to your faucets, thus relieving you of the necessity of carrying a teakettle about.

At any Dealers

San Diego Consolidated Gas and Electric Company

935 Sixth Street

Phone Main 64

Byllesby Engineering & Management Corporation.

by reduction of the needles to one, placing it in the scale of progress between the conifers and the broadleaf evergreens. Occasionally the vestige of a second leaf appears and now and then two diminutive leaves are obvious, showing recapitulation in heredity from the two-leaf pinon of the Colorago and New Mexico, Pinus edulis, whose nuts have a commercial food value.

Pinus Sabiniana, the digger pine of California, belongs in the pinon group, but is limited in range to certain localities, hardly appearing south of Tehachapi pass. Last on the list is the four-leaf pinon, or Mexican nut-pine, a small peculiar looking tree named sometimes Pinus quadrifolia, but more often for Dr. Parry, who discovered its type locality in the mountains of Lower California, 60 miles east of Ensenada. It grows as far north as Julian.

All of these species except the digger pine grow in the pinon belt in our range and are especially prized as a source of food to the pinole-eating Indians and as a winter food for squirrels.

As a scientific product, the one-leaf pine is a near approach to Gingko biloba, the maiden-hair fern tree, a broadleaf confer of China so rare and graceful that it is much prized in landscape effects. This tree is a true gymnosperm with a single seed resembling that of the pinon pine. It shows relationship with the ferns by requiring an unusual quantity of water for fertilization of the seed. For this reason it has not been extensively planted in irrigated districts.

Passing to the upland plateau of Cuyamaca, west of the Colorado Desert, an exposure answering to the humid zone when the so-called high fogs develop into rain clouds, and spring rains are not the exception, there are plant forms that interest students who are in search of liverworts and mushrooms. The simple Chira of the ditches, a freshwater alga similar to sea moss, has a charm of its own. The lower order of hepaticas and lichens are responsive to slight showers as they lie month after month dormant on the fallow soils.

The reactions between mind and its environment are the mystery of living things. Mud in the ditch is said to hold in carbon forms stronger life than that in the human body. Not having an organism to take up and assimilate these chemicals the possibilities of discovery among hydroids is a marvel of creation hardly touched.

None the less, such is the distribution of species that the trend of life has given the little polypody the same power or adaptation to its rock home as to the giant kelp, and it sheds its spore cases in fresh water in the manner of the rockweeds of the ocean—the ferns of freshwater fertilization being partly land and partly water plants.

A most charming study and or great importance in evolution is the fern among the lone boulders. For a day at least one would find a thrill to the core within the porphyry walls surrounding Hulburd's Ranch where all of the plants are Sonoran. Unfortunately for us, but for the good of all the land, the expected came in the shape of a drenching rain. We were all happy to be near a campfire under the dry oaks to boil beefsteak, toast marshmallows and drink hot coffee with sandwiches, with nature's own skewers for cooking.

And as the sun came forth above the glory of the peaks we saw through the thicket the most showy of all the chaparral flowers, Penstemon spectabilis, good-looking as its name signifies, and Trichostema lanatum, woolly bluecurls, "Romeo" of Spanish settlers, who in old times used its seeds for making soothing poultices. Both the rosy California wild pea, Lathyrus splendens and the brilliant red Lathyrus Kelloggi of the Mexican border, shone in the wet tangle of shrubs. A wild coreopsis, cousin to the sea dahlia, Leptosyne maritima, came out with the sunshine. Cercocarpus betulaefolia, the mountain mahogany of the rose family, was in a most interesting stage with its long plumed seed cases. Along the banks the canyon wall flower and scarlet bugler cheered the way with red and gold.

The things that we did not see we will have in mind for they will be there on the next trip when the roads are better, for good roads are a short cut to learning, and the strong truths of life we may be wise enough to interpret in a newer light in the futre.

THE OAKS AT DESCANSO AND VICINITY

Quercus agrifolia, Coast Live Oak. Wislizeni, Interior Live Oak. The Pinon Belt

Quercus chrysolepis, Canyon Live Oak. Quercus Engelmanni, Mesa Live Oak. Quercus Dunni Desert Mountain Live Oak. Mexican Boundary

Quercus dumosa, Chaparral Live Oak. Scrub or Dwarf Live Oak.

A CORRECTION

We hasten to correct a typographical error which occurred in printing an article on "The Rose" in the May number of the Garden. The name of a certain mythological character, one Harpocrates by name, was metamorphosed into "Hippocrates", in which form it appeared. Altho Harpocrates was reputed to be secretive we doubt if he would care to masquerade under an alias, so we apologize to him, who did not exist, to whichever one of the Hippocrates we may have offended, and the author, Mr. Hieatt, who do exist, believing that that is about all we can do under the circumstances.

BOYS' AND GIRLS' PAGE

Conducted by Department of Agriculture, San Diego Schools

Letters from school children, telling of their garden experience will be published each month on this page. Different schools will be represented each month.

A packet of seeds will be given for the best letter from a child about his garden.

THE COMPOSITE FAMILY

The sun-flower and brown-eyed Susan and many others, of the composite family, help to make the woods and country very pretty I will explain to you what I mean by the composite family. This family has many flowers put in one. We will take a dandelion. It is first a composite flower and when it gets old it goes to seed. The seeds are blown over the field and then are covered by soil, grow up and make beautiful yellow dots all over the field.

The brown-eyed Susan is practically the same. The center is made up of a great many little brown flowers form the center, while the outer edge is petals. I thing there is hardly any flower or family that makes the world look more beautiful than these.

EVELYN WYATT.

5-A Grant, May 11, 1921.

Once upon a time I planted a garden. First I dug it up with a pitch-fork. Next I raked it down smooth and then made my rows. I thought that I would plant some cosmos so I got the seed. It said to plant them about one inch below the ground. I thought I would plant some verbenas and sweetpeas. I wanted some sweet sultan, too. I thought I would get some vegetables so I selected some radishes and onions and squash. I planted them and then went in. In two or three days the radishes and onions came up. I had to water them every night. One day my father and mother asked me if I wanted some pansies, asters or tomatoes. I said, "Yes". I transplanted them. In a few days I discovered that one of my squashes was coming up. After a while my cosmos, verbenas, sweet sultan, and sweetpeas were up. I found some little California Privets. My father had just chopped down a fig tree that we had and there were a lot of little California Privets around it. My father had chopped it down because the roots were growing all over and choking the rush bushes. It happened that my garden was outside in the lot so that is why I got it. By this time my radishes and onions were big enough to sell. I have earned 35 cents already.

ARTHUR HAYLER.

5-A Florence School, June 6, 1921.

MY GARDEN

I have a garden at home consisting of radishes, turnips, peas, beans, onions and lettuce. I could plant a few radishes at first or a row and then plant another row in a week or two.

Then I did that for quite a while with all so as soon as you finish one row of radishes there is another row ready to eat. I do that with all of the vegetables in my garden.

I had some beans that weren't growing good so I put some fertilizer on and in a week they were nice and big.

ROBERT CRAIG.

5-A Florence School, June 6, 1921.

MY FLOWER GARDEN

In my garden I have planted two rows of asters.

First I dug a trench one-half an inch deep and put the seed in, I covered, lightly pressed it down and watered good.

In a week they came up, I watered good every other night.

In a box three inches high I have five geranium slips or cuttings. I leave at least four nodes on the slip. Carefully remove all leaves and be sure and do not skin the outside of the stem. Two nodes must be above ground and two nodes below.

Myrtle is very pretty when in bloom and makes a pretty green.

I slip myrtle just like a geranium slip only with more nodes. I have many slips that are growing nicely.

I have some carnation cuttings rooted and growing nicely.

FRANCES LIPPENCOTT.

6-B, June 6, 1921.

I think flowers are well worth knowing. Bees get their honey from the flowers. Some flowers have pistil and no stamens. Others have stamens and no pistil. The stamens have pollen on them. The pollen has to get into the pistil before the ovule can become a seed. The flowers that have stamens and no pistil are sure to get cross fertilization. Sometimes the bees carry the pollen on their feet. They go into the flower and some of the pollen comes off the stamens and gets on the pistil. The pollen sends a tube down the pistil to the ovule. When the tube touches the ovule the ovule becomes a seed.

R. WALDO E.

5A, Florence, May 13, 1921.

I have not a garden so I will tell about the one our room made.

There were two classes, one that went down in the canyon early in the afternoon and the

The California Garden

G. R. Gorton, Editor Office, Court House, San Diego, Cal.

PUBLISHED MONTHLY BY

The San Diego Floral Association

Main Office, Point Loma, California

OFFICERS AND DIRECTORS
G. R. Gorton, President
Mrs. Mary A. Greer, Vice-President
Wm. P. Brothers, Treasurer
Carroll De Wilton Scott, Secretary
F. L. Hieatt,

Miss Mary Matthews, Miss K. O. Sessions

Entered as second-class matter December 8, 1910, at the Post office at Point Loma, California, under the Act of March 3, 1879.

California Garden is on the list of publications authorized by the San Diego Retail Merchants Association.

Subscription, \$1.00 per year

ADVERTISING RATES

TID I ENTIRE MITTER			
One Page	\$10.00	Half Page,	\$5.00
Quarter Page	2.50	Eighth Page	1.50
Advertising Copy s	should be in	by the 20th of each I	Month

Elite Printing Co. 945 7th St., San Diego

second went down when the first came up.

· First we had to get all the rocks away and then level the land as we were making our garden on the side of the canyon. The first class had a garden and the second one did, too. So of course each class tried to make their garden better than the others.

After we had cleared the rocks away and leveled the land we made rows. We soaked the ground good before we planted our vegetables. Miss McAlmond, our agricultural teacher, brought some onions and some lettuce for us to transplant. The onions were small and so were the lettuce. We planted them about three or four inches apart, and soon they grew to be full sized onions and lettuces.

MAGGIE POLK.

5-A, June 6, 1921.

It Is Hard to Live

in the same house with Ants. We are in a position to give you scientific and positive relief from the pests. May we call and explain our service and estimate your place?

Ask about our lawn weeding rakes.

ROBERTS CO.

Office 3232 Third. St. Ph. Hil. 2393

Floral Association Meetings

June 21, 1921, 8 p. m. ANNUAL MEET-ING.

Place of Meeting—Southern California Music Co., 630 C street.

July 5, 1921—2:30 p. m.

Place of Meeting—Mrs. C. W. Darling's Garden, Chula Vista.

July 19, 1921—8 p. m.

Place of Meeting—Mr. W. L. Frevert's Lathhouse, 3535 First street.

Subject—"Lathhouses."

August 2, 1921—2:30 p. m.

Place of Meeting—Mr. Alfred Robinson's Lathhouse, Point Loma.

August 16, 1921—8 p. m.

Place of Meeting, Mr. George Becker's Residence, 2434 A street.

Subject—"Ferns."

TO OUR ADVERTISERS

We suggest changing the copy for your advertisement each month. It will cost you no more, and will make your advertising more timely and the value proportionately greater.

Mention the Garden when you patronize its advertisers.

The

FLOWER SHOP



Cut Flowers Floral Designs

Miss Rainford

1115 Fourth St.

DEPARTMENTIZED SERVICE

INTERESTED—HELPFUL—PERSONAL SERVICE

(Commercial: Savings: Trust)
Safe Deposit: Bond

Southern Trust & Commerce Bank

CAPITAL ONE MILLION DOLLARS

FOURTH AND BROADWAY

Colored Raffia in Great Variety Needles, Reed and Pine Needles

HARRIS SEED COMPANY

"The Seed Service Store"

909 Sixth Street, near E

Rose - Court - Floral - Company

3705 Crane Place. WESTERGAARD BROS., Props.

Wholesale and Retail Growers and Importers: Roses, Bedding and Potted Plants, Bulbs, Ferns, Orchids, Cyclamen our specialty. Also Cut Flowers.

Visitors Welcome. No. 3 Car to Goldfinch St. Phone Hillcrest 898-J

LAWN:

Grass Seed—Kentucky Blue Grass and White Clover. Choice Clean Seed, free from weeds and of high germination. Wizard Fertilizer for lawns, flowers, shrubs, trees, ferns, quickly available, odorless and lasting. Use only one-quarter of the usual amount of commercial fertilizer.

All garden seeds and plants in season.

NEARPASS SEED COMPANY

M. C. WAID

522 Sixth St., San Diego "For Success—Buy the Best"

T. A. YOUNG



- IF your Kodak pictures mean more to you than scraps of paper—
- IF they are records of happy occasions, comradeship and delights of nature—
- IF they are to you things of beauty and a joy forever—

Then, by all means, have them finished in Taylortone
We cannot describe or explain it here, but some

day you'll be grateful for this suggestion

Kodak finishing done for the present and future—

WORK that LASTS

Harold A. Taylor Company

1139 Sixth Street, San Diego

The Elite Printing Company

Nine Forty-Rive Seventh Street San Biego, California

Phone, Main 584



D. F. GARRETTSON, Pres.

H. A. CROGHAN, Auditor

J. S. AKERMAN, Sec'y

PACIFIC WOOD & COAL CO.

IMPORTERS AND DEALERS IN

COAL, COKE, WOOD, HAY and GRAIN

Distributing Agents for
BRADLEY'S STANDARD FERTILIZERS, PRATT'S STOCK FOODS, GOLDEN EAGLE
CHICKEN PROVENDER, ALFALFA MOLASSES STOCK FOOD

Main Office, 411 E St., San Diego, Cal. Tels. Main 145, Auto. 666-08

WAREHOUSES:

4th and K Sts., Phone M. 165. 30th and University, Phone Hil. 1481-J. 5th and University, Phone Hil. 536-W 26th and Logan, Phone Auto. 667-09